The critical issue is: the logic in natural languages and sciences is much more complicated than the logic (or logics) in programming languages, or any other existing logics. Large language models are incomplete and inconsistent.

So, current logic studies, including relevance logic or any other substructural/paraconsistent logics, are inadequate.

There are countless types of mathematical logic and philosophical logic, but none of them could really judge the true/false in natural languages and sciences.

The following analyses could provide the foundation for a better scientific logic.

1) Most of numbers are not computable, or even not definable. How many natural laws are critical on these incomputable or indefinable numbers? This question cannot be answered by humans' sciences and verified by scientific experiments.

It is NOT a trivial issue. So, humans will never have the Theory of Everything. The logic in Prof. Gerard't Hooft's article Free Will in the Theory of Everything is wrong.

2) Actually, humans' sciences are NOT consistent and complete. Even if some pompous physicists still think the problems be trivial in physics, these problems would be amplified enormously in life sciences, and especially in intelligence sciences.

3) Thus, physical sciences, life sciences, intelligence sciences need very different reference systems. Humans should not stop at the reference system theory of general relativity.

4) These different reference systems need very different logic frameworks. There are paradigm shifts across these different reference systems related to logic frameworks. So, people should be specific about what exactly these paradigm shifts are in various situations.

[illegible]

[illegible] Freeman Dyson [illegible] Gerard't Hooft [illegible]

[illegible] Gerard't Hooft [illegible] Gerard't Hooft [illegible]

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[illegible] paradigm shift [illegible]

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Gerard't Hooft [illegible] God's computer[illegible]

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1[illegible] motif[illegible]

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[illegible] Human Brain project [illegible] BRAIN Initiative [illegible] mirror neuron [illegible]AGI [illegible]

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[illegible] Human Brain project [illegible] BRAIN Initiative [illegible] mirror neuron [illegible] mirror neuron [illegible]

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1) [illegible] mirror neuron [illegible]

2) [illegible] OpenAI [illegible]

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4) [illegible]

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[illegible] paradigm shift [illegible]

Gerard't Hooft [illegible] Free Will in the Theory of Everything [illegible] God's laptop[illegible]

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[illegible] inconsistent [illegible]

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[illegible]the selfish gene [illegible] the selfish gene[illegible]

[illegible] the selfish gene [illegible]Richard Dawkins [illegible] Alfred Wallace[illegible] Charles Darwin [illegible]

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[illegible] paradigm shift [illegible] AGI [illegible]

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[illegible] mirror neuron [illegible]

[illegible] 2020 [illegible] 2024 [illegible]

[illegible]

[illegible]

[illegible]“[illegible]”[illegible]

[illegible]

[illegible] Jesuit reduction[illegible]

[illegible]“If I gave an AI ... every single test that you can possibly imagine, you make that list of tests and put it in front of the computer science industry, and I'm guessing in five years time, we'll do well on every single one,"[illegible]

[illegible] billion-dollar [illegible]

[illegible] inconsistency [illegible] inconsistency[illegible] O.J.Simpson [illegible]

[illegible] inconsistency [illegible]

[illegible] Hibert Space[illegible]Word-embedded vector space[illegible]Universal Approximation Theorem [illegible]

[illegible]

1990 [illegible]

[illegible] Turing Machine [illegible] λ-calculus [illegible]

[illegible] λ-calculus [illegible]

[illegible] Human Brain project [illegible] BRAIN Initiative [illegible] mirror neuron [illegible]

[illegible]

[illegible]

[illegible] OpenAI [illegible]“[illegible]”[illegible]“[illegible]”[illegible]“[illegible]”[illegible]

[illegible]“[illegible]”[illegible] OpenAI [illegible]

[illegible] game[illegible]

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[illegible] Universal Approximation Theorem[illegible]Word-embedded vector space[illegible]Hibert space [illegible]

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